START

## **Department of Energy**

Richland Operations Office P.O. Box 550 Richland, Washington 99352

91-ERB-019

JAN 25 1991

President Westinghouse Hanford Company Richland, Washington

Dear Sir:

**\*** "

4

100-NR-3 OPERABLE UNIT WORK PLAN COMMENTS

Attached are the compiled comments from the U. S. Department of Energy review of the 100-NR-3 RCRA Facility Investigation/Corrective Measures Study Work Plan. Comments have not yet been received from Washington State Department of Ecology or the U. S. Environmental Protection Agency (EPA).

In general, the work plan followed EPA guidance and appeared to thoroughly identify potential hazardous waste sites in the 100-NR-3 Areas. However, the following observations noted should be taken into account in preparation of the forthcoming work plans:

1. Lack of Evaluation of Previously Identified Risk

The risks that have been previously identified should be examined to determine what additional characterization and investigation are required.

2. Lack of Evaluation of Available Data

Available data should be evaluated to help understand the extent of contamination, the types of contaminants, sample results of contamination, the extent of past remediation, and site characteristics.

3. Lack of Clarity on Planned Activities for Different Phases

It is not always clear when information will be gathered during the succeeding phases of the Remedial Investigation.

If you have any questions, please contact Mr. Paul M. Pak of my staff on 376-4798.

Sincerely,

ERD: PMP

Attachment

cc w/att:
Bill Green, WHC (computer disk)

R. D. Izatt, Director Environmental Restoration Divisi

JAN 2 8 1991 CORRESPONDENCE CONTROL

nt of Energy review sures Study Work

9100505

Action as appropriate

or cation Divis

78.08.ES 20.00

# DOCUMENT REVIEW: RCRA FACILITY INVESTIGATION/CORRECTIVE MEASURES STUDY WORK PLAN FOR THE 100-NR-3 OPERABLE UNIT, HANFORD SITE, RICHLAND, WASHINGTON

Commenter Codes: S&W = Stone & Webster; DOERL-OCC = DOE Richland - Office of Chief Council; HQ-EM = DOE Headquarters EM-442; HQ-EH = DOE Headquarters EH-222; HQ-EH, ARNL = DOE Headquarters, Argone National Laboratories; DOERL-QAD = DOERL - Quality Assurance Division; WPPSS = Washington Public Power Supply System; DOEOR-EW = DOE Oak Ridge Operations - EW92; DOERL-ERD = DOERL - Environmental Restoration Division

#### Summary

In general the "RCRA Facility Investigation/Corrective Measure Study Work Plan for the 100-NR-3 Operable Unit" is fairly complete. It follows the EPA guidance ("Guidance for Conducting Remedial Investigation and Feasibility Studies Under CERCLA") and it appears to thoroughly identify potential hazardous waste sites in the 100-NR-3 Area.

Comments on the 100-NR-3 Work Plan cover a wide range of topics, but there are several topics on which many comments are made. Probably the most general comment is that it is not always clear what the main purpose of the work plan is. The risks to human health and the environment, which caused the placement of the site on the National Priorities List, are not addressed. There is no attempt to expand on the risks that have been previously identified. This is reflected in the lack of reasoning for obtaining the proposed information. Examples are: A lack of reasoning for either investigating or not investigating certain areas; and, the lack of a description of criteria to be used to identify sample locations. It is essential that all information needed to aid in characterizing the risks at the site and that the needs for the information be explained.

(

Related to the lack of clear objectives is the lack of evaluation of available data. Available data must be evaluated to: 1) Provide direction by determining risks to humans and the environment; 2) justify the need for additional specific data; 3) prevent the duplication of efforts; 4) reduce the time required for the investigation; and, 5) reduce costs. It is much more efficient to evaluate existing data rather than undertaking new investigations. Therefore, the 100-NR-3 Work Plan should be based on all available information. For example, the extent of contamination, the types of contaminants, sample results of contamination and the extent of past remediation should be included in the Work Plan.

It appears that too much emphasis is placed on phasing of investigations. It is not always clear if information will be gathered as part of one of the phases of the RI Phase I investigation or if the information will be gathered as part of the RI Phase II investigation. As much information as possible should be gathered as part of the first phase of the Phase I

investigation in order to limit the number of phases. Also, it should be kept in mind that all activities should be included in a work plan or a proposal in order to allow the DOE the opportunity to review and comment on the proposed activities. Therefore, all activities that will take place, based on this work plan, should be described in the work plan.

#### General Comments

- 1. Physiographic settings should be expanded to provide more information on the salient topographic features of the 100-NR-3 Operable Unit. Features such as: geomorphology, drainage swales, drainage density, proximity of adjacent topographic areas (100-NR-1 and 100-NR-2) and the surrounding Hanford site (areas for recharge and discharge), should be included. (HQ-EH, ARNL)
- A cost estimate for the work should accompany the work plan. A baseline cost estimate should be considered for inclusion. (HQ-EM)

\_\_\_

(\*\*\*

**(**)

e sh

\*\*

C.

3. The Attachment "Health and Safety Plan" needs to be expanded to include site-specific details including descriptions of protective equipment, decontamination procedures for personnel and equipment, and the delineation of the work area. (HQ-EH, ARNL)

### Specific Comments

- 4. Page WP-3, Section 1.1.1, 3rd Paragraph: The Risk Assessment Guidance for Superfund (Dec. 1989) should be referenced and used instead of the Superfund Public Health Evaluations Manual (October 1986). (HQ-EH)
- Page WP-4, Section 1.1.2, 4th Paragraph: In the statement: "...cleanup requirements will be denied from CERCLA policy." denied is an error and it should be changed to derived. (DOERL-ERD)
- 6. Page WP-7, Section 1.1, 2nd Paragraph: The Model Toxics Control Act of 1988 is only now being developed, therefore it is too early to compare it to CERCLA. (DOERL-OCC)
- 7. Page WP-7, Section 1.3.1, 1st Paragraph: The institutional reasons for not addressing the releases from the Washington Public Power Supply System Hanford Generating Plant should be given. It is likely that the regulators or the public will question this at some point, therefore a complete answer should be developed now. (S&W)
- 8. Page WP-7, Section 1.3.1, 1st Paragraph: The extent of the contact of the 100-NR-3 Operable Unit with 100-KR-4 and 100-HR-3 should be indicated. (HQ-EM)

- 9. Page WP-8, Figure 4: The items in the legend should be labeled "operable" instead of "operating". (HQ-EM)
- 10. Page WP-9, Section 1.3.2, Last Paragraph: The finding of imminent and substantial endangerment is made by the regulatory agency prior to issuance of a CERCLA Section 106 or RCRA 7003 administrative order for either short-term or long term remedial action (i.e. the finding of imminent and substantial endangerment does not automatically trigger interim corrective actions). The item "(1) determine the need for interim corrective actions;" would be more appropriate. (HQ-EH)
- 11. Page WP-9, Section 1.3.2, Last Paragraph: It should be indicated that if a phased approach to the RFI/CMS activities is unnecessary, then the process (particularly the RFI) may be performed in one phase. Furthermore, the purpose of the RFI should not be to define the scope of the Phase II RFI; rather, the Phase II RFI may be required if the RFI is later found to be inadequate. (HQ-EM)
- 12. Page WP-10, Section 1.3.2, 2nd Paragraph; Page WP-51, Section 3.1.1; Page WP-141, Section 4.3.1; Page 148, Section 4.3.3.1, 1st Bullet; Page WP-149, Section 4.3.3.2, 1st Bullet; Page WP-167, Section 5.3.2.3.2; Page WP-186, Section 5.3.8, 3rd Paragraph; Page SAP/FSP-9, Section 2.2, 1st Paragraph: All available information should be evaluated before the work plan is complete. Planned activities may easily be either insufficient or redundant if all previous information is not considered. (S&W)

On

500

- Page WP-11, Section 1.5, 2nd Paragraph: The work plan references WHC 1990a as the QA program plan. WHC 1990a is the "Environmental Engineering, Technology and Permitting Function Quality Assurance Program Plan" which has not been approved internally by WHC. It is unacceptable for the work plan to reference documents which have not been approved internally by WHC. In addition, the QA Program Plan does not discuss health physics, radiological protection and other items that are listed. (DOERL-QAD)
- 14. Page WP-21, Section 2.1.3.1.11, 2nd Paragraph: It is stated that the spent regenerant surge tank, effluent stream contains no dangerous or radioactive constituents. This statement should be supported and referenced. (S&W)
- 15. Page WP-24, Section 2.1.5, 1st Paragraph: "Tri-Party Agreement and Action Plan" is incorrect it should be written as "Tri-Party Agreement Action Plan". (DOERL-ERD)
- 16. Page WP-25, Section 2.1.5.1, 3rd Paragraph: RCRA ground water data from the 120-N-2 unit should be evaluated to identify potential contaminants in the unit. (S&W)

- 17. Page WP-28, Section 2.2.2.2: The details of the structural orientation of the outcrops should be included. (HQ-EH, ARNL)
- 18. Page WP-33, Section 2.2.2.2, Figure 12: Information provided about site-specific geology in the 100-NR-3 Unit should be expanded by using the geologic borings BH-12, BH-13, and BH-14 as shown in Figure 12. The information should be used to expand the geologic cross-sections and ground water levels of the 100-NR-3 Unit in Figures 13 through 18. (HQ-EH, ARNL)
- 19. Page WP-39, Section 2.2.3, 3rd Paragraph: The reference "Krug 1989, p. 13" is used to document that the 130-N-1 Filter Backwash Discharge Pond continued to receive discharge until 1990. Verify the validity of the reference since it appears that the date of the reference is too early to document the date that discharge discontinued. (HQ-EM)
- 20. Page WP-47, Section 2.2.6.3: It will take more than just finding a bald eagle of ferruginous hawk in these areas for the areas to be determined to be a critical habitat. Please elaborate on these requirements. (DOERL-OCC)

1

(\_\_)

٨.

( ·

- 21. Page WP-51, Section 3.1.1 and all subsections: In addition to the location, the areal extent of releases and the area of remediation should also be indicated on the associated figures. Also, the extent, including depth, of past remediation and plans for present or ongoing remediation should be described in the text. This information is essential in developing sample and remediation plans and it should be evaluated to the greatest extent possible in the RFI Work Plan. (S&W)
- Page WP-51, Section 3.1.1.1; Page WP-62, Section 3.1.1.2; Page WP-72, Section 3.1.1.3.6; Page WP-91, Section 3.1.1.9; Page WP-93, Section 3.1.1.11; Page WP-96, Section 3.1.1.12: The reasons for investigating each area or facility should be made clear. For example, the reason for including the septic tanks and sanitary drainage fields in a RCRA/CERCLA investigation should be given. In addition, if an area or facility is described, but no investigation is planned, it should be made clear why the area is not considered a hazard. (DOEOR-EW)
- 23. Page WP-60, Section 3.1.1.1.1: The user or users of the Hanford Generating Plant (HGP) burn pit should be identified. The burn pit should not be investigated if it was not used by DOE. (HQ-EM)
- 24. Page WP-60, Section 3.1.1.1.1: It should be noted that the burn pit was last used by HGP on June 1, 1989. (WPPSS)
- 25. Page WP-60, Section 3.1.1.1.1; Page WP-60, Section 3.1.1.1.2; Page WP-60, Section 3.1.1.1.3: The references used to obtain information on these potential waste disposal areas should be identified in case additional information is needed. (S&W)

- 26. Page WP-62, Section 3.1.1.2.2: The source of the liquid that is discharged should be described. In addition, the characteristics of the material at the discharge point are not clear. (S&W)
- 27. Page WP-64, Section 3.1.1.3.1, 1st Paragraph: It is stated that the french drain "was used" until March 1987. Is it now sealed, as this statement implies? (HQ-EM)
- 28. Page WP-75, Figure 30: The location of the 184-N Plant Service Power House is missing from this figure. Also, the orientation and scale of the figure should be included. (S&W)
- 29. Page WP-76, Section 3.1.1.5.3; Page WP-77, Section 3.1.1.6; Page WP-77, Section 3.1.1.7.1: The locations of the following facilities should be indicated on figures: 166-N storage tanks and day tank, well N-16, 184 Annex, 105-N Reactor, 116-N-2 Radioactive Chemical Waste Treatment and Storage Facility, and N-29 Craft Shop. It is more difficult to accurately locate potential waste sources if the facilities used as landmarks are not indicated on figures. (S&W)

M

- 30. Page WP-77, Section 3.1.1.7: The unit 124-N-4 is indicated on Plate 1, but it is not described in this section. The unit 120-N-4 is not indicated on Plate 1, but it is described in this section. This discrepancy should be corrected. (S&W)
- 31. Page WP-77, Section 3.1.1.6, 2nd Paragraph: State whether the values given are curies per liter, or total amounts for the spilled water. State whether sampling was performed at the base of the excavation prior to backfilling, if known. (S&W)
- 32. Page WP-79, Figure 32: The service station underground storage tanks (1716-N) are indicated in another location on Plate 1. This discrepancy should be corrected. (S&W)
- 33. Page WP-80, Section 3.1.1.7.2: The status of the use of the underground storage tanks should be indicated. The quantity of material presently contained in the tanks should be indicated if the tanks are no longer in use. (S&W)
- 34. Page WP-87, Section 3.1.1.8.3, 2nd Paragraph: The integrity of the double lined surface impoundment should be addressed. For example, have leaks been detected? (S&W)
- 35. Page WP-87, Section 3.1.1.8.3, 3rd Paragraph: This paragraph indicates that regeneration effluent was neutralized in the 120-N-1 Surface Impoundment then discharged to the 120-N-1 Percolation Pond. This appears to be an error in designating the impoundments and it should be corrected if this is the case. (S&W)

- 36. Page WP-90, Section 3.1.1.8.3, 2nd Paragraph: The analytical results from the five groundwater monitoring wells near the 120-N-2 Surface Impoundment should be discussed in the 100-NR-3 work plan. The results may indicate what contaminants are present and migrating from the source. (S&W)
- 37. Page WP-90, Section 3.1.1.8.5: The 1143-N Paint Shop is listed under the heading of Sources yet there is no indication of a release or potential release of contaminants from the facility. If there is no evidence of a release, this should be stated. (S&W)
- 38. Page WP-91, Section 3.1.1.9.2; Page WP-91, Section 3.1.1.9.2: The locations of buildings 1117-N and 1113-N should be indicated since they are used as landmarks for potential sources. (S&W)
- 39. Page WP-98, Section 3.1.2.1: An explanation of why the only soil-sampling data that was examined was the background soil data from the area of the 120-N-1 and 120-N-2 ponds, should be given. In addition, the locations of the samples should be indicated on a map or diagram. (S&W)
- 40. Page WP-104, Figure 41: The origins of the areas of inferred soil contamination are not clear. The sources of potential contaminants should be identified to indicate the quantity and types of contaminants in each area. In addition, it is not clear how the information in this figure will be used to develop a sample or investigation plan. (S&W)

\*\*\*\*\*

(1)

- 41. Page WP-104, Figure 41: The reason for one and only one surface soil sample location needs to be explained. (HQ-EH, ARNL)
- 42. Page WP-105, Section 3.1.2.4, 3rd Paragraph: The locations of the 109-N Roof Vents and the 116-N Stack should be identified. The locations of these potential sources is needed to evaluate the sample data from the air sampling stations. (S&W)
- 43. Page WP-110, Section 3.1.5, 1st Paragraph: It is stated that most existing reports of 100-N Area analyses do not include the validation information. The number of reports that do and do not contain validation information, the types of sample data in the various reports, and the usefulness of the various reports should be described. (S&W)
- 44. Page WP-110, Section 3.2, 1st Paragraph: The applicable requirements should be defined as those statutes and regulations which would apply as a matter of law if the Hanford Site had not been listed on the NPL. (DOERL-OCC)
- 45. Page WP-112, Table 12; Page WP-113, Table 13: The heading in the Table should be labeled "Chemical Specific" instead of "Contaminant Specific". (DOERL-ERD)

- 46. Page WP-112, Table 12; Page WP-114, Table 13; Page WP-115 Table 13: The ARAR for Environmental Radiation Protection Standards (40 C.F.R. 191) is not applicable. The Shoreline Management Act is not applicable since the Hanford Site is an NPL site pursuant to CERCLA. The Model Toxic Control Act should be listed as a potentially relevant and appropriate rather than applicable. (DOERL-OCC)
- 47. Page WP-122, Section 3.3.2.2: It is stated that the appropriate CAR for the indicated contaminants of concern should be background. This statement should be supported by citing the appropriate Federal or State guidance. (S&W)
- 48. Page WP-122, Section 3.3.3; Page WP-125, Section 3.3.5: The wording in these sections should be changed to indicate that an immediate or near-term threat does not appear to exist, rather than an imminent and substantial endangerment does not appear to exist. An imminent and substantial endangerment is a finding made by a regulatory agency. (HQ-EH)

- 49. WP-123, Section 3.3.4, 3rd Paragraph: The phrase "relatively high activity ground water (average 353 pCi/L in 1988)" should be referenced. (HQ-EH, ARNL)
- 50. Page WP-125, Section 3.3.5, 3rd Paragraph: It is stated that monitoring data for 100-NR-3 does not indicate an imminent or substantial health or environmental hazard. The data that this proposition is based on should be presented. (S&W)
- Page WP-127, Section 3.4.2, Table 17: Several of the alternatives labeled as "no-action" are described as having institutional controls as a component. Only monitoring is a legitimate component of the "no-action" alternative according to EPA's October 1988 Interim Final RI/FS Guidance (page 4-7).
  - Treatment and/or removal actions should be considered as General Response Actions to address Air and Biota environmental media. Also, other treatment methods (in addition to vitrification) should be considered for soil. (HQ-EH)
- Page WP-135, Section 4.2.3: It is said that the various tasks of a RFI may require different levels of data quality. However, the level of data quality required by each task is not specified. This information should be included in the work plan. (DOERL-QAD)
- Page WP-137, Section 4.2.3, Table 20: The definition of Level V analysis should indicate that CLP SAS is Level V analysis. The part of the definition that indicates what the CLP considers to be Level V analysis is irrelevant here. (DOERL-QAD)

- Page WP-139, Section 4.2.3, Table 21: The "Data Use" for source samples should be indicated (ex.: SC, EA, ED, and RA). Also, RA should be indicated as the "Data Use" for geologic physical properties data. (HQ-EM)
- 55. Page WP-140, Section 4.2.5, 2nd Paragraph: The need for additional scoping studies should be explained. Also, the content of the scoping studies should be described. (S&W)
- Page WP-141, Section 4.3, 2nd Paragraph: It is stated that the first phase of the RFI for the 100-NR-3 operable unit is to continue gathering and analyzing the existing information. The EPA RI/FS guidance document (EPA/540/G-89/004) states that it is important to compile the available data that have previously been collected for a site before the activities necessary to conduct an RI/FS are planned. A thorough search of existing data should help avoid duplication of previous efforts and lead to a remedial investigation that is more focused and, therefore more efficient in its expenditure of resources. (S&W)

**\**\_

**.** 

C

Furthermore, the economic benefits derived from phasing the RFI investigation must be weighed against the increased costs associated with remobilization of labor and materials and potential lengthening of the overall project schedule. (HQ-EM)

- Page WP-144, Section 4.3.2.2, and Table 22: The description of numerical rating "2" states it will be given where "... documented or potential release of dangerous or radioactive wastes to soil have occurred." Justify the assignment of the "2" rating to releases of sanitary sewage from most septic tanks, while one septic tank is given a "3" rating (124-N-1 Septic Tank, in Grouping 3). (S&W)
- Page WP-150, Section 4.3.3.6; Page WP-185, Section 5.3.7: The potential for the presence of hazardous airborne particulates and radon gas should be addressed. (S&W)
- 59. Page WP-155, Section 5.1.5: Progress reports should be provided monthly. There are too many activities that take place each month to provide a report that covers more than one month. (S&W)
- 60. Page WP-165, Section 5.3.2.2.2.1, 2nd Paragraph: It is stated that potentially contaminated areas will be marked for further investigation during Phase III. This should be explained considering that multiple iterations of investigations may take place as part of the RFI. There should not be any areas of potential contamination after such a series of data collection activities. Furthermore, Phase III is the analyses and selection of remedial alternatives; there is no data collection planned in Phase III. (S&W)

Page WP-165, Section 5.3.2.2.2.1; Page WP-165, Section 5.3.2.2.2.2: The rationale for using electromagnetic induction, magnetometer and ground-penetrating radar is not clear. Based on the description of these techniques, the use of all of them is redundant. The need for all three techniques should be clearly justified. (S&W)

The potential sources of interference for the geophysical survey techniques proposed in the work plan should be identified. (HQ-EH, ARNL)

- 62. Page WP-166, Section 5.3.2.2.3: The area of use of the soil gas survey should be indicated on a site map. The reasoning for using the technique in certain areas should be described. (S&W)
- 63. Page WP-166, Section 5.3.2.3, 1st Paragraph: It should be determined when samples will be collected to characterize the extent of contamination. Also, the statistical method that will be used to determine the extent of contamination should be described. This is a major consideration and it should be determined at the RI/FS Work Plan stage and be approved by all parties. (S&W)
- 64. Page WP-167, Section 5.3.2.3.2 and all subsections; Page SAP/FSP-8, Section 2.2 and all subsections: The use of field screening techniques should be described for releases of contaminants; or, if the sample location is determined based on data review and evaluation this should be explained and the location of the sample should be indicated in the work plan. The criteria to be used to determine sample locations should be described to prevent locations from being chosen incorrectly by field personnel. (S&W)

J.

- 65. Page WP-172, Section 5.3.2.3.2.3, 2nd Paragraph: A subsurface sample is recommended at the 120-N-3 Neutralization Pit since it is unlined. Also, the type of material to be sampled should be described. (S&W)
- Page WP-172, Section 5.3.2.3.2.3, 3rd Paragraph: The type of material that will be sampled at the 120-N-8 Sulfuric Acid Sump Tank Vent French Drain should be described. (S&W)
- 67. Page WP-173, Section 5.3.2.3.2.8, 2nd Paragraph: It is not clear why source sampling is not planned for 120-N-1 and 120-N-2 as part of this work plan. Furthermore, it is not clear what the Krug 1989 characterization plan will include, when the information will be available and how the information will be incorporated into the RFI/CMS investigation. These things should be described in the work plan. (S&W)
- 68. Page WP-184, Section 5.3.3.1: The need for additional geologic information should be explained and the type of additional geologic information needed should be described. (S&W)

- 69. Page WP-184, Section 5.3.3.3: The nature of geologic assessments should depend on the requirements of the risk assessment, not the data acquired and interpretive needs of the Phase I assessments. (S&W)
- 70. Page WP-187, Section 5.3.9, 1st Paragraph; Page SAP/FSP-30, Section 9.0: It is not clear why additional archaeological studies are needed. If there are reasons for believing that additional archaeological or historic sites are present, or that the previous archaeological studies are inadequate they should be given. (S&W)
- 71. Page WP-192, Section 5.3.11.3, 2nd Paragraph: The values of "25 mrem/yr effective dose equivalent" and "10E-4" risk level should be referenced. These values should not be proposed without serious consideration. For example, there is a possibility that the DOE believes a proposed value is too restrictive, but the regulators would accept either the proposed value or a less restrictive one. Therefore, there should be some assurance that the proposed values are cost effective for the DOE and acceptable to the regulators. A range of several values, with references, may be considered. (HQ-EM)

14.5

- 72. Page WP-192, Section 5.3.11.4, 2nd Paragraph: The excess carcinogenic risk goal should be consistent with the goal in the NCP and Proposed Corrective Action Rule (10E-4 10E-6). (HQ-EH)
- 73. Page WP-221, Section 5.7.2: The NEPA document is generally referred to as the Hanford Remedial Action Environmental Impact Statement (HRA-EIS). (S&W)
  - The scope and content (e.g.: RFI/CMS activities, remedial actions, closure, etc.) of the HRA-EIS report should be indicated. (HQ-EM)
- 74. Page WP-220, Section 5.6.5, 1st Paragraph: It should be indicated that EPA retains authority to select the preferred remedial alternative until Ecology obtains HSWA authority. (HO-EH)
- 75. Page WP-221, Section 5.7.3: The report that may be attached to the EIS should be clearly identified. In addition, the report should be called a supplement, as it is referred to in the NEPA regulations, rather than an amendment. (DOERL-OCC)
- Page WP-224, Figure 47: It is recommended that the work that will be done as part of the 100-NR-1 work plan be included in the 100-NR-3 schedule. It can be made clear that the work will be done as part of the 100-NR-1 activities. This will allow plans to be made to incorporate the 100-NR-1 information in the 100-NR-3 operable unit evaluation. (S&W)

- 77. Page SAP/FSP-1, Section 1.0, 1st Paragraph: In the last sentence of the first paragraph ("Sampling contractors should be familiar with...") it is recommended that "should" be replaced with "shall." It is important for all personnel to be familiar with the pertinent documentation. (DOERL-QAD)
- 78. Page SAP/FSP-4, Section 2.1.1.2.1: The justification for the area of coverage of the radiological survey should be given. (DOEOR-EW)
- 79. Page SAP/FSP-5, Section 2.1.2.1.1; Page SAP/FSP-6, Section 2.1.2.2.1: The area of use of the electromagnetic induction, magnetometer and ground-penetrating radar surveys should be indicated on a site map. The reasoning for using each of the techniques in certain areas should be described. (S&W)
- 80. Page SAP/FSP-7, Section 2.1.3.1: The areas where soil-gas surveys are planned should be justified. A soil-gas survey may not be justified around buildings where there is no evidence of a release of hazardous materials. (HQ-EM)

74.

N.

- 81. Page SAP/FSP-9, Section 2.2, 1st Paragraph; Page SAP/FSP-9, Section 2.2.3, 1st Paragraph; Page SAP/FSP-18, Section 2.2.5, 2nd Paragraph: The method for determining the sample locations should be described. An objective method for determining sample locations should be identified rather than picking a location based on one persons judgement. The criteria that will be used to determine sample locations should be identified. Also, available data should be reviewed and discussed in the work plan to clarify it's affect on the selection of sample locations. (S&W)
- 82. Page SAP/FSP-9, Section 2.2, 1st Paragraph: Criteria should be given for field screening. (S&W)
- 83. Page SAP/FSP-9, Section 2.2.2, 1st Paragraph: A plan for access to the 124-N-2 Septic Tank should be proposed. The RFI/CMS work plan should include approaches to potential hinderances. (S&W)
- 84. Page SAP/FSP-13, Figures FSP-1 through FSP-4: The figures should include more detail so that the sample locations can be more accurately located. For example, the area of contamination and pertinent topographic features may be included. (S&W)
- 85. Page SAP/FSP-33, Section 10.2: Inapplicable procedures should be removed from this section (e.g.: groundwater sampling and all drilling procedures). If subsequent RFI phases require this type of work, these procedures should be included in the Supplemental Work Plan. (HQ-EM)

- 86. Page SAP/QAPP-1, Section 1.3: The QAPP should apply to all activities that will be conducted under this work plan. These activities include data reduction, validation and reporting. (DOERL-QAD)
- 87. Page SAP/QAPP-27, Section 8.2.1: It is stated that Level II screening (field analysis) is indicated in Table QAPP-1. However, it is not clear, in Table QAPP-1, when this type of analysis will be used. (HQ-EM)
- 88. Page SAP/QAPP-1, Section 1.3; Page SAP/QAPP-16, Section 4.1.1: Section 1.3 references an unreleased document "Westinghouse Hanford Company quality assurance (QA) program plan for Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial investigation/feasibility study (RI/FS) activities". It is not yet clear if this document will be released. This document should not be referenced until it is positive that it will be released. (DOERL-QAD)
- 89. Page SAP/QAPP-25, Section 6.0: The calibration procedures for levels I, II and IV of analysis should be listed. (DOERL-QAD)

 $\sim$ 

.

## **DISTRIBUTION COVERSHEET**

**Author** 

RD Izatt/DOE-RL

Addressee

President/WHC

Incoming Correspondence No.

9100505

Action as appropriate

Subject 100-NR-3 Operable Unit Work Plan Comments

18328

Internal Distribution				
Approval	Date	Name	Location	w/at
		Correspondence Control President's Office	A3-01	- X
•		RE Lerch (Assignee)		Х
		RJ Bliss		X
		KL Hoewing		
ļ		EP Vodney		:
		JR Knight		Х
		KR Jordan		Х
		LC Brown	H4-51	Х
	1	KR Fecht	H4-56	χ
		WL Johnson	H4-55	Х
	[	AL Mize	B2-35	Х
·		j~K Parnell	H4-18	Х
		DI Waite	B2-35	X
<u> </u>		TM Wintczak	L4-92	Х
		RD Wojtasek	L4-92	X
		LL Powers	B2-35	Х
	}	MR Adams	H4-55	Х
		BA Austin	B2-14	Х
		WE Green, Jr.	H4-55	Х
		MJ Lauterbach	H4-55	Х
		TB Veneziano	B2-35	X
			JAN 2 8	MANNAGE [3]

DISTRIBUTION CORRECTIONS SHOULD BE SENT OR CALLED TO MARIAN CRAM 54-6000-117 (09/88)
. A3-01 6-4123 or CC Mail